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REMARKS

Claims 1-29 are pending in the present Application. Claim 2 has been canceled, claims 1, 18-19, and 27 have been amended, leaving claims 1 and 3-29 for consideration upon entry of the present Amendment. The Specification was amended to include the filing date, publication number, and title for an application having the attorney docket No. 120801. No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-29 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over JP 5192307 in view of US 4804712 to Traugott et al. further in view of US 6696528 to Moses et al. Applicants respectfully traverse this rejection.

JP 5192307 (English Abstract only) generally discloses two polymers melted in respective extruders and passed through a stationary mixer. The blended polymers are then passed through a filter and extruded into filaments from a spinning nozzle.

US 4804712 generally discloses blends of polyarylene ether resins and anionically-polymerized monovinylidene aromatic compounds having a molecular weight distribution not greater than 1.8 characterized by a lowered melt viscosity.

US 6696528 generally discloses a low molecular weight engineering thermoplastic polyurethane (ETPU) that can be homogeneously melt blended with a polyarylene ether (PAE) to give a low viscosity melt processable blend, and subsequently cooled to form a heterogeneous dispersion of the ETPU in the PAE that has two Tgs, one that is close to the Tg of the pure ETPU, and one that is close to the Tg of the pure PAE.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that

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would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Independent claims 1, 26, and 27 are each directed to a method of purifying a polymeric material by melt filtering a melt of poly(arylene ether) and poly(alkenyl aromatic). In each claim, the filtered polymeric material is substantially free of visible particulate impurities. None of the cited references teach or suggest melt filtering a melt of poly(arylene ether) and poly(alkenyl aromatic) to provide a filtered polymeric material that is substantially free of visible particulate impurities. Accordingly, the references fail to render the independent claims obvious as each and every element of the claims is not taught or suggested by the references. As claims 3-25 and 28-29 all ultimately depend from claim 1, they too have not been rendered obvious. The Applicants respectfully request reconsideration and removal of the § 103(a) rejections over claims 1 and 3-29.

Furthermore, claims 1 and 26 require a particular residence time in the extruder of less than or equal to about 5 minutes and less than or equal to about 1 minute, respectively. None of the references teaches or suggests melt filtering a melt of poly(arylene ether) and poly(alkenyl aromatic) wherein the melt has a residence time in the extruder of less than or equal to about 5 minutes or 1 minute. Although US 6696528 teaches preparing a polyurethane/poly(arylene ether) composite using a co-rotating recirculating twin screw extruder with a residence time of five minutes, the reference fails to teach or suggest a melt of poly(arylene ether) and poly(alkenyl aromatic) which is subsequently melt filtered. Neither of the remaining two references, US 4804712 or JP 5192307 provides the teaching for the missing element. Accordingly, as each and every claim limitation has not been taught or suggested, the Applicants respectfully assert that a *prima facie* case of obviousness has not been established for independent claims 1 and 26, as well as their dependent claims.

Notwithstanding the above argument, there is no motivation to combine the references or modify US 6696528 to limit the residence time as the reference is directed to a

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blend of different polymeric materials. There is no teaching or suggestion in the references to assume that the properties of the polyurethane blends would be similar or comparable to the properties of a melt of poly(arylene ether) and poly(alkenyl aromatic) such that similar residence times in an extruder would be feasible. As the present claims are directed to purifying polymeric material, it is important to provide conditions so as to minimize the formation of particulate material in the final product. One of ordinary skill in the art would not look to composites of a polyurethane and poly(arylene ether) as teaching for how long a poly(arylene ether)/poly(alkenyl aromatic) melt can be present in the extruder, especially when the extruded product needs to be substantially free of visible particulate impurities. Different polymers and different polymer blends have their own distinct properties. Accordingly, the Applicants respectfully assert that the cited references contain no suggestion or incentive that would have motivated the skilled artisan to modify or combine them. Reconsideration and removal of the rejections are respectfully requested.

Finally, claim 27 requires the extruder to have a specific throughput rate of about 0.5 kg/cm³ to about 8 kg/cm³. None of the references teaches or discloses melt blending poly(arylene ether) and poly(alkenyl aromatic) in a twin screw extruder to form a melt that is subsequently melt filtered to a particular level of impurities, wherein the extruder has a specific throughput rate of about 0.5 kg/cm³ to about 8 kg/cm³. Each reference, alone or combined, fails to teach or suggest the particular combination as is required by independent claim 27. Accordingly, the Applicants respectfully request reconsideration and removal of the rejection to claim 27.

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Double Patenting

Claims 1-29 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1-45 of copending Application No. 10/648,609 and claims 3-49 of copending Application No. 10/922,194. Applicants thank the Examiner for pointing out the alleged, potential obviousness-type double patenting issues between the claims of the present application and those of the copending applications. However, Applicants will defer until claims are allowed and it is determined whether this provisional rejection becomes an actual double-patenting rejection.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By


Roberta L. Polletier

Registration No. 46,372

Date: August 1, 2005
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No.: 23413